

IEEE BHUBANESWAR SUB SECTION

NEWSLETTER

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Editor-In-Chief: Dr. Sujata Chakravarty

ABOUT IEEE

IEEE Mission & Vision

IEEE is the world's' largest technical professional organization dedicated to advancing technology for the benefit of humanity. Below, you can find IEEE s' mission and vision statements.

Vision statement

IEEE will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.

Mission statement

IEEE s' core purpose is to foster technological innovation and excellence for the benefit of humanity.

About IEEE

IEEE and its members inspire a global community to innovate for a better tomorrow through highly cited publications, conferences, technology standards, and professional and educational activities. IEEE is the trusted voice for engineering, computing, and technology information around the globe.

Membership Benefits

IEEE membership offers access to technical innovation, cutting edge- information, networking opportunities, and exclusive member benefits. Members support IEEE s' mission to advance technology for humanity and the profession, while memberships build a platform to introduce careers in technology to students around the world.

ABOUT EC NEW MEMBERS ADDED IN THE YEAR 2018



Dr. Raman Agrawalla is a Ph. D. in Economics and Management Studies from the Faculty of Management Studies, University of Delhi. He has more than two decades of academic and industry experience involving teaching, training, research, innovation, design and strategic management. A Senior Consultant at the Tata Consultancy Services, Dr. Raman has assumed various roles like Senior Scientist, R&D Manager, IP Manager and Head of the Strategic Initiatives in the INS1 in the organization. A Senior Member of the IEEE, Dr. Raman is also a Life-Member of 'All India Management Association' (AIMA), 'Indian Science Congress Association' and 'The Indian Econometrics Society' and was a Member of its Executive Committee for 2008-09. A National 'Management Council' Member of the AIMA, he is named as a "Leading Scientist of the World 2013" by

International Biographical Centre, Cambridge, England.



Dr. Debi Prasad Das holds B.Sc. (Hons.) degree in physics, M.Sc. degree in Electronics and the Ph.D. degree in electronics and instrumentation engineering. He has been working as a Scientist at Council of Scientific and Industrial Research (CSIR), India from 2005. Previously he was as CSIR-CEERI, Pilani and presently working as a Senior Scientist at CSIR-IMMT, Bhubaneswar. He works in the area of electronics and instrumentation systems, signal and image processing, IoT etc.

Dr. Das was a recipient of the Orissa Young Scientists Award (2004, CSIR Young Scientist Award (2009), BOYSCAST Fellowship (2009-10), NI Engineering Impact Award 2014 (Runners-up), AICTE-INAE Distinguished Visiting Professorship-2018 and Mentor of

Change for Atal Tinkering Lab in 2018 by Niti Ayog, Govt. of India.



Dr. Pradyumna Kumar Tripathy has completed his M.Tech. and Ph.D. in Computer Science from Utkal University, in 2007 and 2015 respectively. He is currently working as Assoc. Prof. and Head in the Dept. of CSE, Silicon Institute of Technology, Bhubaneswar. He has more than 15 years of experience in teaching and research. His research interests include Reliability Engineering, Parallel Distributed Systems and Machine Learning. He has published many research articles in different reputed journals and conferences like IEEE, Elsevier, Springer, IJPE etc.. He has guided more than 20 M.Tech scholars in their thesis work. He is also being a resource person for many reputed educational institutions like Utkal University, Sambalpur University, BPUT, Revenshaw University, IMIS etc. He

has received "Swami Vivekananda Prativa Puraskar-2016" on the eve of Odisha Youth Conclave-2016 for the contribution to the technical education in Odisha.



Er. Umamani subudhi, a Member, IEEE is presently working as a Assistant professor in EE department of IIIT Bhubaneswar. She has more than 10years of teaching experience. She teaches Power Electronics, Transmission and Distribution, Electrical Machines and Control System etc. Her areas of research include Power Electronics and Drives and Power Quality.

LECTURE SERIES

Lecture I: Title: Transformer Quality Assurance - Challenge of the day

Venue: IIT Bhubaneswar, 16th May 2018

The main objective of the program focused on design aspects of Transformers in a cost effective way without compromising the quality of materials. The speaker recommended to continue rigorous R&D work on various topics such as use of superconducting materials, Static Tap Changer, laboratory method for measurement of Magnetising In-rush current, thermal modelling to determine hot spots and improvement in Cooling methods, etc.

Speaker: Shri Ashok Kumar Samantaray, General Manager, GRIDCO, Odisha

Ashok Kumar Samantaray (M'58) was born in Cuttack, Odisha, India in 1960. He received Bachelor's Degree in Electrical Engineering from Regional Engineering College, Rourkela (Present-day National Institute of Technology, Rourkela), in 1982. He joined Department of Irrigation and Power under Govt. of Odisha in 1982 and has served in various capacities in the Power Sector of Odisha after completing Bachelor's Degree.

During his career as a Power Engineer, he has developed expertise in the field of Design, Testing and Quality Control of Switch Yard Equipments like Power/Auto Transformer, Current Transformer, Voltage Transformer, Surge Arrester, Isolator and D.C. System. He is one pioneer in the development of Advanced Technical Specification of both Power and Auto Transformers for the State of Odisha to ensure reliability and performance during operation in the Field Units. Presently, he is looking after the Regulatory and Policy matters as General Manager (Electrical) in GRIDCO Ltd., Odisha.



Talk by Shri Ashok Kumar Samantaray



Getting Memento after Talk from Dr. S. R. Samatray

Lecture II: Title: Best Practices on Earthing System

Venue: Silicon Institute of Technology, Patia, Bhubaneswar, 27th May 2018

IEEE IC PES Chapter along with silicon Institute of Technology, Bhubaneswar organized a **One Day Tutorial on "Best Practices on Earthing System" on 27th May 2018** at Silicon Institute of Technology, Patia, Bhubaneswar.

This tutorial was designed on the various issues related to earthing in safe and reliable operation of power systems. In this tutorial the various topics discussed were: Philosophy, Design and Safety on Earthing System, "Myths" and Mis (Concepts) on Earthing in Electrical, Basics on Earthing System, Case Studies on Safety Aspects for Earthing System, Earthing: A Systematic Solution, Solution for critical Earthing.

The tutorial concluded with a panel discussion in which various practical issues related to earthing and their mitigation were discussed by subject experts.

Mr. Sangram Keshrai Swain, Additional Secretary, Energy Department, Govt. of Odisha, Prof A K Tripathy, Chair, IEEE India Council PES chapter, Er. A K Das, Member, OERC, Prof. S K. Mishra, Director, SIT addressed the forum.

The expert speakers who spoke the delegate in various sessions were

- Er. K. L. Sahoo
- Er. P. K. Pattanaik
- Experts from Inter-tech, New Delhi
- Experts from BRUHAT Engineering and Services LLP, Bhubaneswar
- Experts from Maa Sharda Structures & Suppliers Pvt. Ltd. Gwalior

The tutorial triggered lot of interest among practicing engineers. Practical demonstrations and case studies were the main attraction.

Registered delegates

There were 113 registered delegates who attended.

Sponsorship

IEEE India Council PES Chapter (Technical), IEEE Bhubaneswar sub-section , IEEMA, Inter-tech, New Delhi BRUHAT Engineering and Services LLP, Bhubaneswar



Prof. A K. Tripathy, Chair, IEEE India IC PES Chapter



Experts from BRUHAT Engineering and Services speaking on Basics on Earthing System



Course Coordinator Er. P.K. Pattnaik, D.G.M., OPTCL, addressing the delegates



Delegates in the tutorial

ACTIVITIES

IEEE: Orientation, Membership Benefits and Volunteering Opportunities

By Ankit Dave, Young Professional, IEEE Gujarat Section, Students Activity Chair, IEEE Bhubaneswar Sub Section on 16th Febreuary 2018 at School of Electrical Sciences, IIT Bhubaneswar

The first activity of the year 2018-19, a talk on "IEEE: Orientation, Membership Benefits and Volunteering Opportunities" by Ankit Dave, an IEEE Young Professional, was conducted on 16.02.2018, at 03.00 PM in SES, IIT Bhubaneswar. Dr. Subhransu Ranjan Samantaray, Secretary, IEEE Bhubaneswar Sub Section and Dr. Debi Prosad Dogra, Treasurer, IEEE Bhuabneswar Sub Section, Coucilor, IEEE Student Branch also addressed the students on this occasion. Forty five students including B.Tech, M.Tech and Research Fellows have attended.







CONNECTERE 1.0 - One Day Workshop on Networking Fundamentals, 24th March 2018 By Dr. Padmalochan Bera, Assistant Professor, School of Electrical Sciences, IIT Bhubaneswar At School of Electrical Sciences, IIT Bhubaneswar

The workshop on basic networking fundamentals was conducted on 24th March 2018 in School of Electrical Sciences, IIT Bhubaneswar for the students of the institute at free of cost. The workshop started with a Welcome address by Dr. Debi Prosad Dogra, Treasurer, IEEE Bhuabneswar Sub Section, Coucilor, IEEE Student Branch. The lecture on Transformation from Computer Network to SDN given by Dr. P. L. Bera from SES, which includes FTP Applications, Client Server Applications, Network Topology, SDN Flow Setup and control etc. Hands-on session on networking simulators such as mininet, Open Day Light, Open Flow 2.0 was also delivered to the participants. There are above 80 students applied for the workshop, out of which 40 students were short listed, 36 students have attended the workshop from various disciplines and completed the workshop successfully. The workshop concluded with certificate distribution.







IEEE-EDS NIST Berhampur Student Chapter has organized a technical lecture on "Scaling vs ESD: The driving strength of Semiconductor Industry" on 21st February, 2018 at National Institute of Science & Technology, Palur Hill, and Berhampur for the graduate and undergraduate students to bring enhance the research activity.

Speaker: *Mr. Basudev Dash,* currently working as a Sr. Analog Design Engineer at Intel Corporation, US. He has done his MS at University of Minnesota- Twin Cities, US. Approximately 120 participants have attended the talk and responded with very nice interactive session.

Mini-Colloquium on "Quantum Electronics", 23rd February, 2018 by IEEE-EDS NIST Student Chapter, Berhampur, ODISHA,

IEEE-EDS NIST Student Chapter has organized the 8th Mini-Colloquium on "Quantum Electronics" on 23rd February, 2018 at National Institute of Science & Technology, Palur Hill, and Berhampur for the graduate and undergraduate students. More than 120 participants have registered from different institutes and universities from odisha and outside as well. Four distinguished lectures



have been organized throughout the day followed by the inaugural function. Dr. Subir Kumar Sarkar, from Jadavpur University talked about MOSFET Scaling: Basic Concepts and approaches. He gave the new dimensions of research methods focusing on low threshold and parasitics and effect of EM and ESD. Dr. G N Dash pushed the concept of Graphene structure and a true alternative of MOS Device. Dr. Chandan Kumar Sarkar from Jadavpur University and Dr. Yogesh Singh Chauhan from IIT-Kanpur talked about the compound Semiconductors and their structures. IEEE ED-NIST Student Chapter has conducted 8th Mini-Colloquium in series and giving an opportunity to all the students and researchers to interact with different DLs to create new milestones in the field of electronics and semiconductor.



4th National Conference on Devices and Circuits (NCDC-2018) IEEE-EDS NIST Student Chapter, Berhampur, ODISHA

IEEE-EDS NIST Student Chapter has organized the 4TH National Conference on Devices and Circuits (NCDC-2018) on 24TH February, 2018 at National Institute of Science & Technology, Palur Hill, and Berhampur for the final year graduate and undergraduate students.

Speakers: **Professor Rakesh Vaid** from university of Jammu **and Professor Saumya Pandit** from University of Calcutta gave the invited talks in two different sessions.

More than 80 participants have registered from different institutes and universities from odisha and outside as well. Approximately 60 papers have been received from different universities and institutes like NIST Berhampur, KIIT Bhubaneswar, VSSUT Burla, University of Calcutta and many other research institutes in devices, circuits, and testing. The works "Effect of Cap Layer in an InP/InGaAs Metamorphic ∂-doped Heterojunction Bipolar Transistor" and "RTL Implementation of Programmable Peripheral Interface using UMC180nm Technology" were awarded as best presentation in device and circuit session respectively.



Talk delivered by Professor Rakesh Vaid

Four- Weeks Technical Lecture Series on "VLSI Circuits and Role of Modern CAD Tools" By IEEE-EDS NIST Student Chapter, Berhampur, ODISHA.

IEEE-EDS NIST Student Chapter has organized a four-week technical lecture series from 19th May - 16TH June, 2018 at National Institute of Science & Technology, Palur Hill, and Berhampur for the 2nd and 3rd year B. Tech graduates on "VLSI"

Circuits and Role of Modern CAD Tools". More than 30 participants have attended from different institutes and universities from odisha. Dr. A K Panda delivered IEEE Distinguished Lecture on recent trends in VLSI industries and job

opportunities for the fresher. In his discussion, he pointed out the change in circuit complexity and saturation in terms of new design. Computer Aided Design tools plays the major role in analyzing the complex circuits and helps students to get jobs in silicon industries. Also emphasized on free tools their use at student level. The technical lecture came to an end with development understanding of efficient models that makes the simulations more realistic. IEEE ED-NIST Student Chapter will continue to conduct such activities to contribute more and more to the growth of electronics and to attract young minds.



The team has demonstrated the Tanner EDA, TINA-TI, and XILINX followed by a practice session.

Five Days Technical Lecture Series on "CMOS Analog IC and Two-port Network Synthesis" By IEEE-EDS NIST Student Chapter, Berhampur, ODISHA

IEEE-EDS NIST Student Chapter has organized fivedays technical lecture series from 22nd April - 26TH April, 2018 at Electronics Center of Excellence (e-COE), DCB-621, DLF Cyber City, Patia, Bhubaneswar for the B. Tech graduates, Post Graduates and diploma students on "CMOS Analog IC and Twoport Network Synthesis". More than 20 participants have attended from different institutes and universities from



odisha and outside Odisha. Mr. Ranjit Dash discussed about the analog IC design, two-port models, and synthesis of basic RC Networks. Mr. Dash has more than 20 years of experience in Texas Instrument. He emphasized on hands on with RLC networks and most importantly selection of components based on specifications and applications. Students were given with basic components to design and allowed to measure the parameters using high-end measuring instruments set at the center.

Events at Kalinga Institute of Industrial Technology Bhubaneswar (School of Electrical Engineering)

One day meet up on the Benefits of being a member of IEEE and Planning the Future Roadmap for KIIT-IEEE Student Branch Chapter (2nd December, 2017)

The objective of the meet is to prepare a full road map for KIIT-IEEE Student Branch Chapter. It was discussed to activate the branch by organizing events and activities and creating new Contacts with professionals from all around the world.





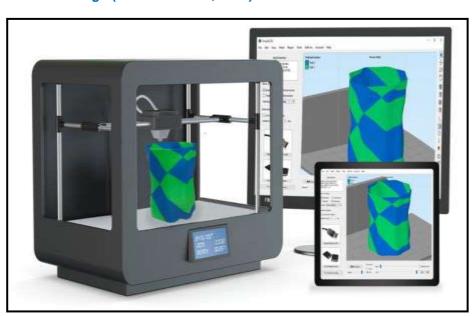
The meet up was headed by: Mr. Ankit Dave (IEEE Young Professional)

One-day Workshop on 3D Printing and Product Design (20th December, 2017)

The workshop was organized to know and identify the important parts of a 3D printer and to Create own 3D models using CAD software. Full hands-on were conducted for the software AutoCAD Fusion 360

Expert: Mr. Ashutosh Patra, Senior Product Designer, eGlobetech India Ltd

The workshop was done with the support of Dr. Kundan Kumar (Advisor Student Branch Chapter, IEEE), Prof. Subhendu Bikas Santra (IEEE Member, Kolkata Section) and Dr. C.K Panigrahi (Dean, KIIT School Electrical Engineering).



One-day Workshop on "Introduction to Internet of Things" (20th December, 2017)

The objective of the workshop is to identify research opportunities in IoT technology, applications and services. It is demonstrated how to create low cost embedded project using Arduino and how to connect it with Android phone and talk to cloud.

One-day Workshop on Smart Grid Issues and Challenges. (13th April, 2018)

In the workshop there was a discussion on various Issues and challenges on Smart grid.



SOCIAL ACTIVITIES

Silicon Institute of Technology to ignite social responsibility among students. Final round was conducted on 16th 2018. On February the preliminary round of this event around 70 students from Silicon, KIIT University, C.V. Raman, Basic Science College participated.In the final round Five teams (40 students)presented their social work in front of the juries. By promoting such an enthusiastic event IEEE Students Branch, SIT is able to nourish the social awareness among the young minds.

IEEE students Chapter Silicon institute of Technology (SIT) an event of Socio-technical activities namely "GO-Freak" during NOESIS2k18, the TECHFEST of the institute. GO-Freak is an initiative by the IEEE students Chapter,



UTSAH, the winning team from OUAT, BBSR receiving prize from Ms. Sharada Bharati (jury member) & Seema Behera(IEEE student brach faculty coordinator)



Thunder, Runners up team

Jury members D. Prakash Rao (Social Activist from ASHA O ASWASANA) & Ms Sharada **Bharati (Social Activist from SPARSH** foundation)



EC MEETING



Annual General Meeting-2018 held on 20.01.2018 at IIT, Bhubaneswar



9th EC Meeting at Sarang held on 31st March 2018



Prof. A.K. Tripathy, Vice Chair IEEE Bhubaneswar Sub-section address the gathering



Mr. Ankit Deve's discussion regarding Benefit of Student Chapter



Dr. Sujata Chakravarty's discussion regarding Benefit of Woman Student Chapter



Prof. (Dr.) Ganapti Panda, Chair IEEE Bhubaneswar Sub-section getting the Memento at the end of the Meeting



Dr. S. R. Samantray, Secretary IEEE Bhubaneswar Subsection getting the Memento at the end of the Meeting



EC Members Leaving the Guest house at IGIT Sarang

INTERNATIONAL WOMEN'S DAY CELEBRATION



International Women's Day program – 8th March 208 at Future Odisha, Bubaneswar



Dr. Sujata Chkravarty - Chief Guest Address the Gathering

Editorial Staffs

Dr. Sujata Chakravarty (OEC, Bhubaneswar), Editor-In- Chief

Dr. Pradyumna Kumar Tripathy (Silicon Institute of Technology, Bhubaneswar), Member

Er. Umamani Subudhi (IIIT, Bhubaneswar), Member



Dr. Sujata Chakravarty got the award "Jhansi Rani Laxmibai Prativa Puraskar for Education and Research" at Jaydev Bhaban, Bhubaneswar from Hon"ble Minister Mr. Prafulla Samal of Women and Child Development on the eve of International Women's Day 2018.